Application No. 10/560,829

Reply to Office Action of April 15, 2008

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An immature A newborn NOD/SCID/IL2rg-null immunodeficient

mammal (excluding human), into which human-derived hematopoietic stem or precursor cells or

mature hematopoietic cells have been transplanted, and which is able to generate immunocompetent cells derived from said human-derived hematopoietic stem or precursor cells

and/or physiologically active substances derived from said immunocompetent cells.

2. (Currently Amended) An immunodeficient mammal obtained as a result of the breeding of

the immature a newborn NOD/SCID/IL2rg-null immunodeficient mammal (excluding human)

according to claim 1, into which human-derived hematopoietic stem or precursor cells have been

transplanted, and which is able to generate immunocompetent cells derived from said human-

derived hematopoietic stem or precursor cells and/or physiologically active substances derived

from said immunocompetent cells, or a progeny thereof.

3. (Cancelled)

4. (Currently Amended) The newborn mammal according to claim 1, or the mammal or a

progeny thereof, wherein the hematopoietic stem or precursor cells are derived from bone

marrow, cord blood, or peripheral blood.

5. (Currently Amended) The newborn mammal according to claim 1, or the mammal or a

progeny thereof, wherein the immunocompetent cells are at least one selected from the group

consisting of B cells, T cells, dendritic cells, NK cells, and NKT cells.

6

GMM/MTC

Docket No.: 4456-0105PUS1

Application No. 10/560,829

Reply to Office Action of April 15, 2008

6. (Currently Amended) The newborn mammal according to claim 1, or the mammal or a

Docket No.: 4456-0105PUS1

progeny thereof, wherein the physiologically active substance is a cytokine and/or an

immunoglobulin.

7. (Currently Amended) The newborn mammal according to claim 6 or a progeny thereof.

wherein the immunoglobulin is any one selected from the group consisting of IgG, IgM, IgA,

IgD, and IgE.

8. (Currently Amended) The newborn mammal according to claim 1, or the mammal or a

progeny thereof, wherein the immunodeficient NOD/SCID/IL2rg-null mammal is an

immunodeficient NOD/SCID/IL2rg-null mouse.

9. (Withdrawn) A method for producing a mammal capable of generating immunocompetent

cells derived from a human and/or physiologically active substances derived from said

immunocompetent cells, or a progeny thereof, which is characterized in that it comprises

transplantation of human-derived hematopoietic precursor cells or mature hematopoietic cells

into an immature immunodeficient mammal (excluding said human).

10. (Withdrawn) The method according to claim 9, wherein the immature immunodeficient

7

mammal is a newborn immunodeficient mammal or a fetal immunodeficient mammal.

11. (Withdrawn) The method according to claim 9, wherein the hematopoietic precursor cells are

derived from bone marrow, cord blood, or peripheral blood.

12. (Withdrawn) The method according to claim 9, wherein the immunocompetent cells are at

least one selected from the group consisting of B cells, T cells, dendritic cells, NK cells, and

NKT cells.

13. (Withdrawn) The method according to claim 9, wherein the physiologically active substance

is a cytokine and/or an immunoglobulin.

14. (Withdrawn) The method according to claim 13, wherein the immunoglobulin is any one

selected from the group consisting of IgG, IgM, IgA, IgD, and IgE.

15. (Withdrawn) The method according to claim 9, wherein the immunodeficient mammal is an

immunodeficient mouse.

16. (Withdrawn) A method for producing a human-derived antibody, which is characterized in

that it comprises recovering immunocompetent cells from the mammal according to claim 1, or

the mammal or a progeny thereof, culturing said immunocompetent cells in the presence of an

antigen or a stimulator, and collecting said human-derived antibody from the obtained culture

product.

8

17. (Withdrawn) The method according to claim 16, wherein the immunocompetent cells are at

least one selected from the group consisting of B cells, T cells, dendritic cells, NK cells, and

NKT cells.

18. (Withdrawn) A method for producing a human-derived antibody, which is characterized in

that it comprises immunizing the mammal according to claim 1, or the mammal or a progeny

thereof, with an antigen or a stimulator, and collecting said human-derived antibody from the

immunized mammal.

19. (Withdrawn) The method according to claim 18, wherein the antibody is collected from

blood plasma or serum.

20. (Withdrawn) A disease-model mammal, which is produced by administering to the mammal

according to claim 1, or the mammal or a progeny thereof, any one selected from the group

consisting of bacteria, viruses, tumor cells, and tumor antigen peptides, or a progeny thereof.

21. (Withdrawn) The mammal according to claim 20 or a progeny thereof, wherein the disease is

an infectious disease.

22. (Withdrawn) A method for screening for an immune-related pharmaceutical, which is

characterized in that it comprises administering a test substance to the mammal according to

9

Docket No.: 4456-0105PUS1

claim 1, or the mammal or a progeny thereof, and evaluating the effectiveness of the test substance.

23. (Withdrawn) The method according to claim 22, wherein the immune-related pharmaceutical

24. (Withdrawn) A method for producing immunocompetent cells, which is characterized in that it comprises recovering said immunocompetent cells from the mammal according to claim 1, or

25. - 26. (Cancelled)

the mammal or a progeny thereof.

is a vaccine.

27. (Withdrawn) A method for producing immunocompetent cells, which is characterized in that it comprises recovering said immunocompetent cells from the mammal according to claim 20 or a progeny thereof.

28. - 33. (Cancelled)

34. (New) The immunodeficient mammal according to claim 2, wherein the hematopoietic stem or precursor cells are derived from bone marrow, cord blood, or peripheral blood.

Reply to Office Action of April 15, 2008

35. (New) The immunodeficient mammal according to claim 2, wherein the immunocompetent

cells are at least one selected from the group consisting of B cells, T cells, dendritic cells, NK

cells, and NKT cells.

36. (New) The immunodeficient mammal according to claim 2, wherein the physiologically

active substance is a cytokine and/or an immunoglobulin.

37. (New) The immunodeficient mammal according to claim 36, wherein the immunoglobulin

is any one selected from the group consisting of IgG, IgM, IgA, IgD, and IgE.

38. (New) The immunodeficient mammal according to claim 2, wherein the NOD/SCID/IL2rg-

null mammal is an NOD/SCID/IL2rg-null mouse.